







A Message from the Director

Lake Michigan provides the resources for many economic and recreational activities that help support the northwest



Indiana region. In the past, there has been remarkable progress for the protection and restoration of this valuable natural resource. Challenges continue to face the region as the demand for available resources grows with the increasing population.

The Lake Michigan Coastal Program highlights Indiana's commitment to enhance the lake and its watershed for present and future generations. The program will provide the framework for developing partnerships between local communities and organizations as we seek long-term protection for Indiana's greatest natural, economic and cultural resources.

Larry D. Macklin
Director, Indiana Department of Natural Resources









What is the Lake Michigan Coastal Program?

ndiana is developing the Lake Michigan Coastal Program to participate in a national initiative with 33 other coastal states to protect, restore and responsibly develop Indiana's coastal areas.

The beautiful Lake Michigan shoreline, which runs for 45 miles inside Indiana's boundary, is home to rare species, such as the Peregrine falcon and the Eastern massasauga rattlesnake, and more than 1,400 types of plants. Indiana's shoreline is also home to Indiana's International Port at Burns Harbor, one of the busiest shipping ports on the Great Lakes and St. Lawrence Seaway. In 1999, more than 2 million tons of goods passed through the port.

After Indiana has created a Lake Michigan Coastal Program, it will be eligible to join the federal Coastal Zone Management Program and receive more than \$600,000 each year to help with coastal projects. These could include developing a regional trail system, restoring local park habitats and planning for economic development. The Coastal Zone Management Program, established in 1972 through a partnership between coastal states and the National Oceanic and Atmospheric Administration, is active in 33 of the nation's coastal states.

The Indiana Department of Natural Resources, which is leading the development of the Indiana Lake Michigan Coastal Program, has worked with local and state agencies and organizations to

identify priorities for Indiana's coastal region. These priorities are outlined in a draft plan of the program available at http://www.state.in.us/dnr/lakemich. The draft plan explains how Indiana can meet these regional priorities through the state's existing laws and management structure. The Department of Natural Resources is seeking public input on the draft plan. The department will hold six input meetings in northwest Indiana to give the public an opportunity to learn more about the draft plan. Comments from these meetings will be recorded and included in a draft Environmental Impact Statement (DEIS) before a final impact statement is developed. The draft plan was developed with the input of the Northwest Indiana Public Workgroups and the Blue Ribbon Advisory Panel.

The Benefits of the Lake Michigan Coastal Program (LMCP)

- Building partnerships with federal, state and local agencies
- Receiving more than \$600,000 annually to implement the LMCP and Coastal Grants
 Program for local communities
- Consistency with Indiana's existing state laws
- Technical assistance on coastal management issues
- Participation in a network of coastal professionals

Indiana Lake Michigan Watershed Facts:

About 22 percent of the Lake Michigan coastal region consists of commercial and residential developed land.

About 30 percent of the Lake Michigan coastal region remains in its natural state.

More than 29 percent of the Lake Michigan coastal region is agricultural land.

Northwest Indiana is home to approximately 17 percent of Indiana's residents, and is one of the state's fastest-growing regions.

About 2 million people visit the Indiana Dunes area each year. Of those who visit the shoreline, 86 percent enjoy swimming and boating.

More than 6,000 acres of parks and nature preserves are owned by state and local governments in the coastal region. Many of these parks are in need of restoration.

Why implement a Lake Michigan Coastal Program?

The Indiana Lake Michigan Coastal Program will help preserve, protect, restore and, where possible, develop the resources of the coast for this and future generations. The program's goals are to:

- Protect and restore significant natural resources.
- Prevent the loss of life and property in coastal hazard areas.
- Improve public access for recreational purposes.
- Protect and restore important historic and cultural resources.
- Improve government coordination in policy and decision-making.

- Prevent and reduce non-point source pollution that affects coastal waters.
- Revitalize urban waterfronts and ports.
- Provide for priority water-dependent uses.

Components of the Lake Michigan Coastal Program

Existing Policies and Laws

The draft plan for the Lake Michigan Coastal Program was developed from existing policies and laws for land, water uses and resource protection. The draft plan does not create any new federal regulatory authority or require any new state regulations.



- Formed by a 6,500-foot-thick glacier retreating 11,000 years ago and leaving sand, silt, clay, boulders and large volumes of water behind
- Second largest lake, by volume, of the Great Lakes
- 307 miles long, 118 miles wide, 558 feet maximum depth in the southern basin
- The only Great Lake entirely within the continental United States
- 45 miles of coastline and 241 square miles of Lake Michigan are within Indiana

Ten priority issues have been identified with the help of the public. They include:

- Procedural framework
- Coastal hazards
- Water quality
- Water quantity
- Natural areas, fisheries, wildlife, and native and exotic species
- Recreation, access, and cultural resources
- Economic development
- Pollution prevention, recycling, reuse and waste management
- Air quality
- Property rights



After the Lake Michigan Coastal Program has been established, it will make grants available through the Indiana Coastal Grants Program to accomplish local goals. The grants will be awarded based on an annual competitive basis. The program will hold annual public meetings in the coastal region to collect input on that year's priorities and to identify emerging issues. The grant program will address Coastal Natural Resources Protection and Restoration, Coastal Community Enhancement and Sustainability and Emerging Issues.

These funds can be used for projects such as:

- Low-cost construction projects, such as dune walkovers and boat launches.
- Planning and creation of beach access points.
- Reinvigorating economically depressed waterfront areas.
- Preventing and monitoring beach erosion.
- Providing technical assistance on shore protection and bluff stabilization.
- Providing assistance for local planning.
- Restoration of natural habitats.



Northwest Indiana Industry

Did You Know...

An average of 13,000 people move to northwest Indiana each year.

Northwest Indiana *produces* about *one-quarter of the nation's steel*. About 30,000 people in the region make their living in this industry.

Employees at *U.S. Steel's Gary Works* receive on-the-job environmental training.

Bethlehem Steel Corporation's Burns Harbor facility is the only steel plant in America bordered on two sides by a national park.

Indiana's International Port at Burns Harbor in Portage is one of the busiest for shipping on the Great Lakes and in the St. Lawrence Seaway. In 1999, more than 2 million tons of goods passed through the port.

Two-thirds of the population in the Great Lakes Basin of both Canada and the United States are within one day's drive of Northwest Indiana.

Northwest Indiana Environment

Did You Know...

Compared to all other regions in Indiana, the Lake Michigan coastal region contains the greatest number of rare species such as:

- Peregrine falcon
- Eastern massasauga rattlesnake
- Karner blue butterfly
- Prairie white-fringed orchid

Indiana's Lake Michigan shoreline and its surrounding dunes, woodlands, bogs and prairies are home to more than 1,400 types of plants.

Indiana Dunes State Park consists of 2,182 acres of primitive, beautiful, historic, and amazingly unique Hoosier landscape. The Park was established in 1925 and includes more than three miles of beach along Lake Michigan.

The Indiana Dunes region is where Henry Chandler Cowles, known to many as the "father of ecology," conducted his landmark studies of plant succession in the early 1900s. As a result of his work, the Indiana Dunes became known as the "birthplace of ecology."

What areas does the program include?

The Lake Michigan Coastal Program has a defined boundary, called the Coastal Program Area, that outlines the land and water eligible for the program's financial and technical assistance. The proposed boundary, established based on public participation, includes the region's watershed, which encompasses a majority of the area that drains into Indiana's portion of Lake Michigan through its rivers, streams, ditches, wetlands, lakes and groundwater.

A watershed approach allows for comprehensive planning for natural resources and focuses on producing environmental results while incorporating the communities that depend on those natural resources. This approach also can leverage financial and other resources, improve coordination among governmental jurisdictions and reduce duplication of efforts and conflicting actions.

The program boundary is located in the northern part of Lake, Porter and LaPorte counties and extends into Lake Michigan to the borders of Illinois and Michigan. At its widest point, the boundary extends away from the shoreline about 17 miles to Crown Point,

and at its narrowest point it extends inland less than two miles, north of Hudson Lake in LaPorte County. The program boundary includes Indiana's portion of Lake Michigan and follows the southern watershed boundary along the Valparaiso Moraine. The program boundary does not include land owned or leased by the federal government. But federal agencies are still obligated to comply with any federal or state laws associated with the coastal area.

Lake Michigan Coastal Program Network

State and local agencies and public organizations will form partnerships to work towards the common goal of conserving Indiana's coastal resources through the Lake Michigan Coastal Program Network.

The regulatory roles of state and local organizations managing resources in the coastal region will remain the same. The program will be based on existing policies, laws and programs and will link existing agencies and laws into a coordinated system. The program also will help improve the abilities of local, state and federal agencies to work together on priorities and achieve results.

Coastal Program Network Roles

Local governments are active in economic development, land-use issues, emergency response, and flood plain management, along with the development and enforcement of local regulations. Through the Lake Michigan Coastal Program, local governments will have an opportunity to obtain financial and technical assistance in order to develop and implement inventories, plans and community projects.

State agencies carry out a range of programs related to the conservation of coastal resources. The Lake Michigan Coastal Program describes existing policies and laws and the roles of the state departments. It also details how the public can influence the agencies involved in making those policies and laws.

Federal agencies conduct many activities within the coastal region. Indiana's goals will be represented on the federal level through its partnership with the Coastal Zone Management Program. Federal agencies will work with the Coastal Program Network to reduce duplication of effort, improve coordination of projects and better understand state and local priorities.

Coastal Areas of Significance

Some coastal areas have special conditions that require increased attention. These areas are distinguished by their unique coastal characteristics or for the competition of their resources. The coastal region boasts many existing environmental and economic initiatives that identify and address significant areas. The Lake Michigan Coastal Program will devote attention to Coastal Areas of Significance by identifying these areas and their potential for partnership opportunities. State agencies, local government, organizations and the general public can nominate Coastal Areas of Significance.

Identification of Coastal Areas of Significance will bring attention to areas with special conditions. Because adequate regulations are











already in place in most cases, the program will help coordinate efforts to achieve common goals. Coastal Areas of Significance will be prioritized within the Coastal Grants Program, and efforts will be made to improve agency cooperation, technical assistance, restoration, protection, research and local planning.

The Lake Michigan Coastal Program identifies Coastal Areas of Significance through two categories: Areas of Particular Concern and Areas for Preservation and Restoration.

Areas of Particular Concern

These are groups of coastal areas that face similar problems and have common priorities. Areas of Particular Concern are important to the public for their ecological, recreational, historic, cultural, or economic values.



The Lake Michigan Coastal Program describes the primary issues facing the areas, provides guidelines on priority uses of these areas, and criteria for identification. The following are categories of Areas of Particular Concern that are described in the Lake Michigan Coastal Program:

- Areas of unique, scarce, fragile, or vulnerable natural habitats.
- Areas of historical significance, cultural value, or substantial recreational value.
- Areas of high natural productivity or essential habitat for living resources, including fish, wildlife, endangered species and the various trophic levels in the food web critical to their well-being.
- Areas needed to protect, maintain, or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, sand dunes, and offshore sand deposits.
- Areas where development and facilities are dependent upon the use of or access to coastal waters or areas of unique features for industrial or commercial uses or dredge spoil disposal.
- Areas where development, if permitted, may be subject to significant hazard due to storm, slides, floods, erosion and settlement.

Areas for Preservation and Restoration

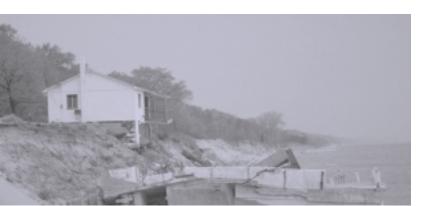
These are areas requiring protection or restoration for their conservation, ecological, or recreational values. They are public or protected sites where the preservation and restoration of the areas' unique values are management priorities. Funds may also be used to acquire Areas for Preservation and Restoration from willing sellers, however, the state of Indiana will remain sensitive to the potential impact on local economies. Several conditions must be met for a site to receive designation as an Area for Preservation and Restoration:

- The site must meet at least one of the Areas of Particular Concern criteria and be voluntarily submitted for designation by the landowner.
- The special values of the site must require restoration or protection in addition to that addressed under the Areas of Particular Concern criteria.
- The site must be clearly delineated on publicly held lands or on lands voluntarily protected by the landowner.

Federal Consistency

After the Lake Michigan Coastal Program is approved, federal projects that affect the state's coastal program area will have to adhere to state law. This process, federal consistency, is a powerful tool available to coastal states and encourages early coordination of federal actions that affect Indiana's coastal region. Indiana would be able to object to those federal actions that don't follow Indiana's policies and laws.

Ogden Dunes erosion



Barker Mansion



Beverly Shores Depot



Bathers on beach



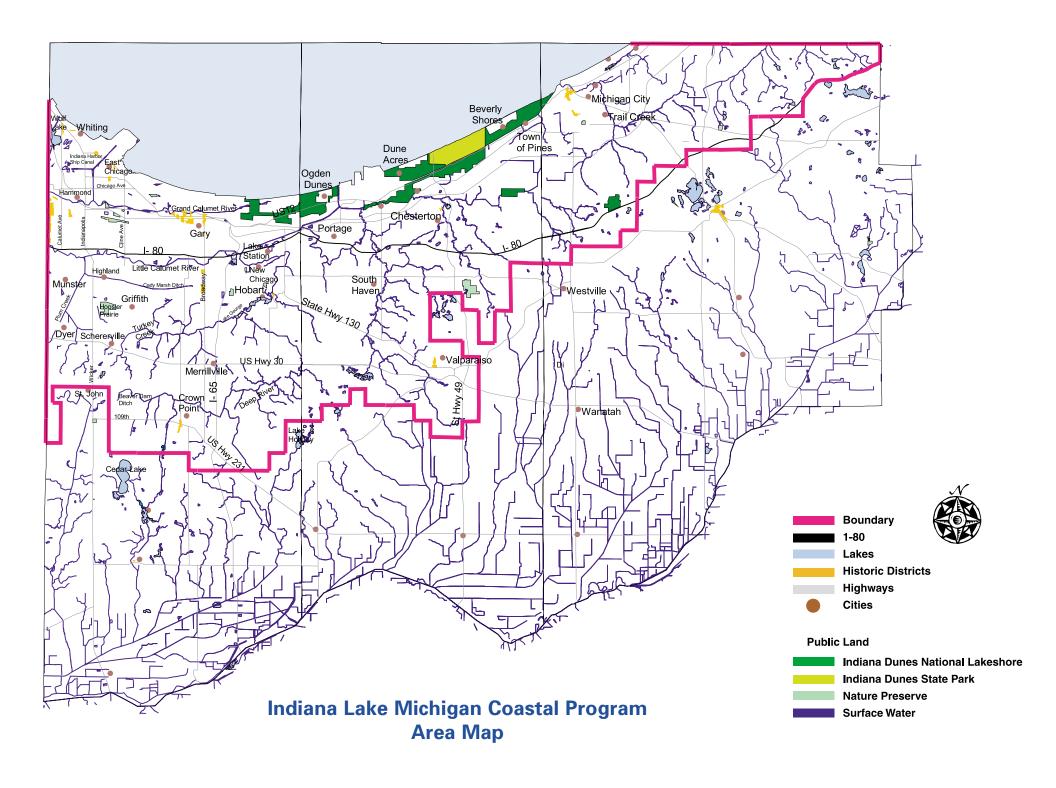
Summary

The Lake Michigan Coastal Program is the result of much effort by federal, state, and local agencies, and the participation of local citizens. It's also a significant step in Indiana's efforts to develop a partnership with the Coastal Zone Management Program.

The Lake Michigan Coastal Program is a dynamic plan that will continue to be updated to reflect the priorities of Indiana's coastal region. Through continuing public participation, the Lake Michigan Coastal Program will enhance the state's role in planning for and managing natural and cultural resources and building partnerships between federal, state and local agencies and organizations.







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